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National Park Service  
Cultural Landscapes Inventory  
1998

Revised 2005



White Sands NM Historic District  
White Sands National Monument

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## **Table of Contents**

Inventory Unit Summary & Site Plan

Concurrence Status

Geographic Information and Location Map

Management Information

National Register Information

Chronology & Physical History

Analysis & Evaluation of Integrity

Condition

Treatment

Bibliography & Supplemental Information

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## **Inventory Unit Summary & Site Plan**

### **Inventory Summary**

#### **The Cultural Landscapes Inventory Overview:**

##### **CLI General Information:**

##### Cultural Landscapes Inventory – General Information

The Cultural Landscapes Inventory (CLI) is a database containing information on the historically significant landscapes within the National Park System. This evaluated inventory identifies and documents each landscape's location, size, physical development, condition, landscape characteristics, character-defining features, as well as other valuable information useful to park management. Cultural landscapes become approved inventory records when all required data fields are entered, the park superintendent concurs with the information, and the landscape is determined eligible for the National Register of Historic Places through a consultation process or is otherwise managed as a cultural resource through a public planning process.

The CLI, like the List of Classified Structures (LCS), assists the National Park Service (NPS) in its efforts to fulfill the identification and management requirements associated with Section 110(a) of the National Historic Preservation Act, National Park Service Management Policies (2001), and Director's Order #28: Cultural Resource Management. Since launching the CLI nationwide, the NPS, in response to the Government Performance and Results Act (GPRA), is required to report information that respond to NPS strategic plan accomplishments. Two goals are associated with the CLI: 1) increasing the number of certified cultural landscapes (1b2B); and 2) bringing certified cultural landscapes into good condition (1a7). The CLI maintained by Park Historic Structures and Cultural Landscapes Program, WASO, is the official source of cultural landscape information.

Implementation of the CLI is coordinated and approved at the regional level. Each region annually updates a strategic plan that prioritizes work based on a variety of park and regional needs that include planning and construction projects or associated compliance requirements that lack cultural landscape documentation. When the inventory unit record is complete and concurrence with the findings is obtained from the superintendent and the State Historic Preservation Office, the regional CLI coordinator certifies the record and transmits it to the national CLI Coordinator for approval. Only records approved by the national CLI coordinator are included on the CLI for official reporting purposes.

##### Relationship between the CLI and a Cultural Landscape Report (CLR)

The CLI and the CLR are related efforts in the sense that both document the history,

significance, and integrity of park cultural landscapes. However, the scope of the CLI is limited by the need to achieve concurrence with the park superintendent resolve eligibility questions when a National Register nomination does not exist or the nomination inadequately addresses the eligibility of the landscape characteristics. Ideally, a park's CLI work (which many include multiple inventory units) precedes a CLR because the baseline information in the CLI not only assists with priority setting when more than one CLR is needed it also assists with determining more accurate scopes of work.

In contrast, the CLR is the primary treatment document for significant park landscapes. It, therefore, requires an additional level of research and documentation both to evaluate the historic and the existing condition of the landscape in order to recommend preservation treatment that meets the Secretary of Interior's Standards for the treatment of historic properties.

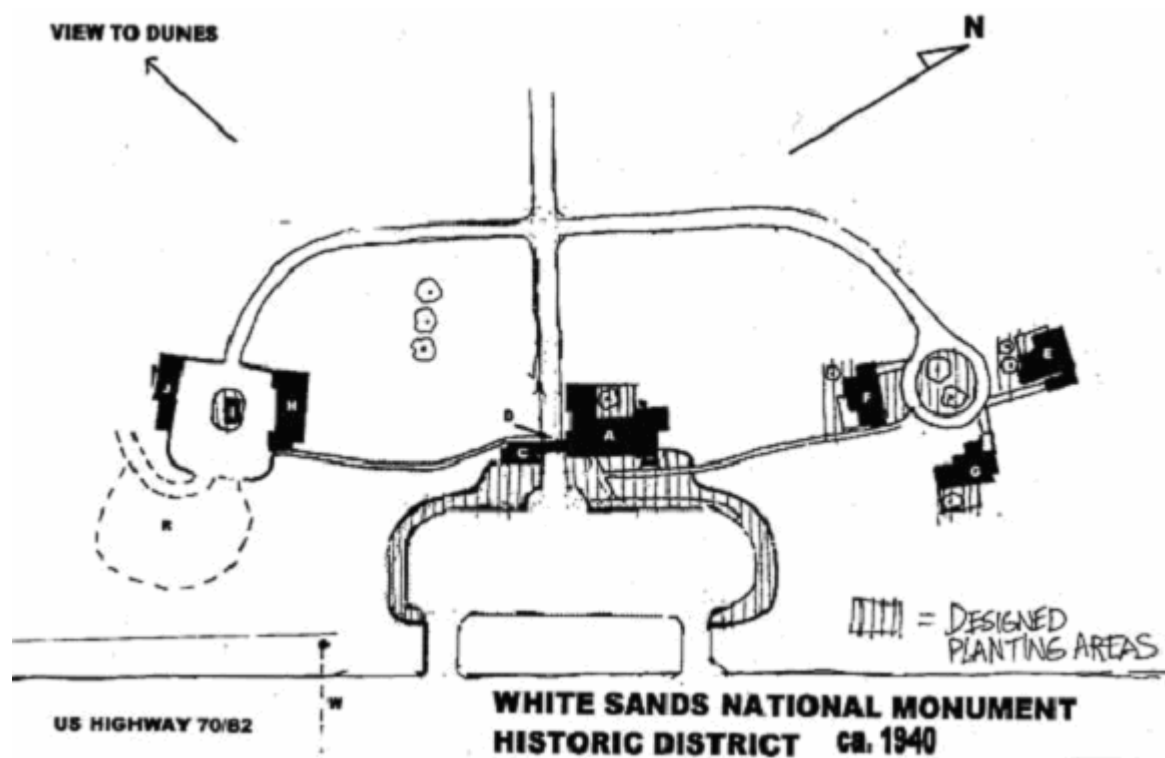
The scope of work for a CLR, when the CLI has not been done, should include production of the CLI record. Depending on its age and scope, existing CLR's are considered the primary source for the history, statement of significance, and descriptions of contributing resources that are necessary to complete a CLI record.

#### **Inventory Unit Description:**

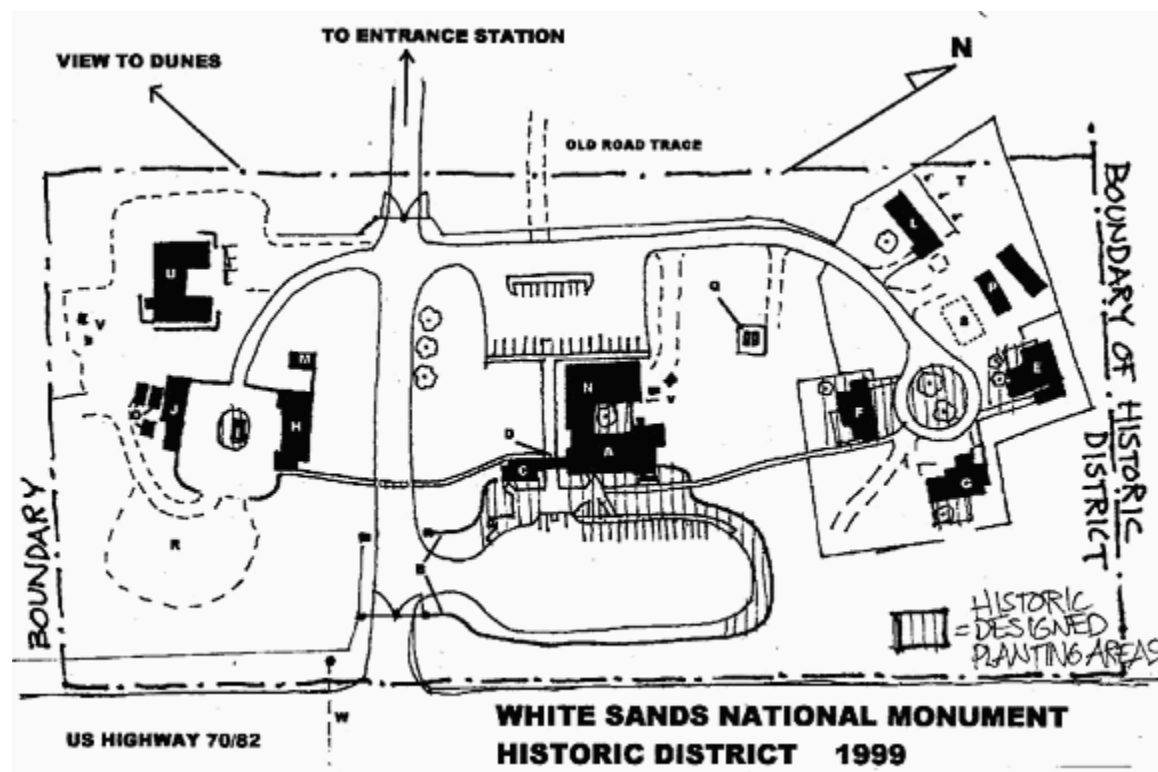
The landscape of the White Sands NM Historic District was designed during the period 1936-40 as a center for park visitors, administration, residence for park staff, and park maintenance. The design was developed by NPS architects, funded by the CWA, and constructed by WPA workers.

The Historic District includes a museum/administration building, with attached concession area and comfort station, an employee's residential area with four residences (three WPA and one Mission 66), a maintenance area with warehouse/laundry, utility/powerhouse, gas and oil building, paint/flammable storage building, new administration building, and assorted sheds, drives, parking areas, gates, and walls.

## Site Plan



*White Sands NM Historic District ca. 1940. See Key in Supplemental Information.*



*White Sands NM Historic District 1999. See Key in Supplemental Information.*

### Property Level and CLI Numbers

<b>Inventory Unit Name:</b>	White Sands NM Historic District
<b>Property Level:</b>	Component Landscape
<b>CLI Identification Number:</b>	850106
<b>Parent Landscape:</b>	850105

### Park Information

<b>Park Name and Alpha Code:</b>	White Sands National Monument -WNSA
<b>Park Organization Code:</b>	7810
<b>Park Administrative Unit:</b>	White Sands National Monument

## Concurrence Status

**Inventory Status:** Complete

**Completion Status Explanatory Narrative:**

The CLI is based in part on previous work by Peggy Froeschauer-Nelson. Lance Foster revised some of the previous CLI and added new material based on his site visits to White Sands National Monument.

**Concurrence Status:**

<b>Park Superintendent Concurrence:</b>	Yes
<b>Park Superintendent Date of Concurrence:</b>	07/12/2002
<b>National Register Concurrence:</b>	Eligible -- SHPO Consensus Determination
<b>Date of Concurrence Determination:</b>	07/18/2001

**Revisions Impacting Change in Concurrence:**

**Revision Date:** 01/25/2005

**Revision Narrative:**

Judy Kowalski made revisions to the 2000 draft in response to a letter from the New Mexico Historic Preservation Division of the Office of Cultural Affairs to Superintendent James A. Mack dated July 18, 2001. The changes were made in the Statement of Significance, the History section and the Buildings discussion in the Analysis and Evaluation section to address concerns outlined in the letter.

<b>Data Collection Date:</b>	08/17/1994	<b>Recorder:</b>	P. Froeschauer, L. Foster
<b>Data Entry Date:</b>	07/12/2002	<b>Recorder:</b>	J. Kowalski

## Geographic Information & Location Map

**Inventory Unit Boundary Description:**

White Sands NM Historic District  
White Sands National Monument

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The boundary for the White Sands NM Historic District includes all the original buildings in the design developed during the period of significance (1933 1940). Three use areas, made up of building clusters, are included: the park maintenance area, the residential area, and the visitor use/administration area. The boundary as defined by the National Register Nomination (1988) is:

“...The boundary starts at a point on the northwest side of U.S. Highway 70/82, 700 feet northeast of the present Monument entrance road. From this point the boundary moves in a southwest direction along the northwest side of the highway for 1100 feet. At this point the boundary turns northwest and runs for 600 feet. At this point, the boundary turns on northeast and proceeds for 1100 feet. At this point, the boundary turns and runs for 600 feet to the starting point on the highway.”

For purposes of the cultural landscape, consideration should be made to include the face of the approaching dunes to the west, as the visitor area has elements, such as the patio, which focused on the significant view of the approaching dune field. In the original NR documentation no graphic was located that established district boundaries; only a verbal description was given. The site plan (see) in this report shows boundaries based on that verbal description.

**State and County:**

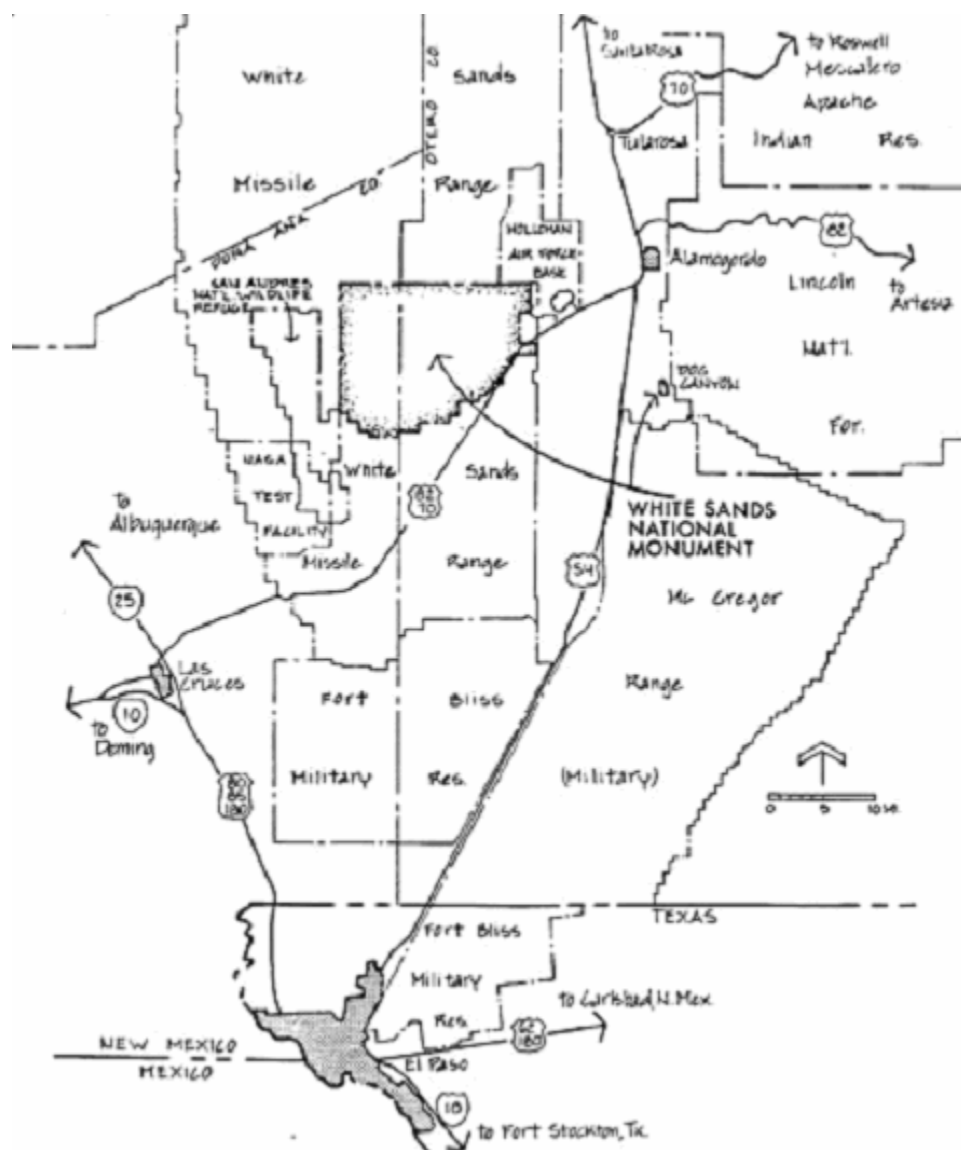
**State:** NM

**County:** Otero County

**Size (Acres):** 10.00



**Location Map:**



*White Sands National Monument is located in the south central part of New Mexico, 15 miles southwest of Alamogordo.*

**Regional Context:**

**Type of Context:** Cultural

**Description:**

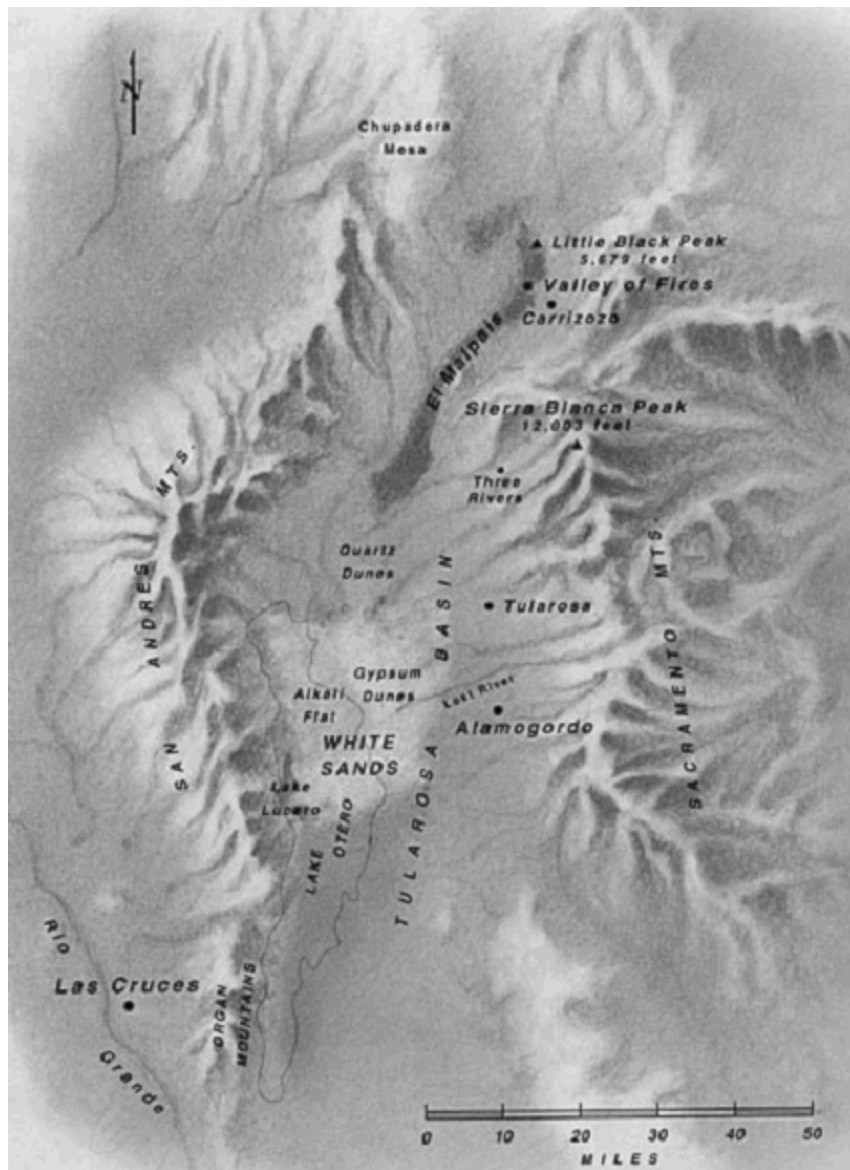
The designed landscape and the historic structures that are associated with the White Sands National Monument reflect the cooperative efforts of the National Park Service professional staff, the administrators and workers of the Federal Public Works programs, and local citizen supporters. Funds, labor, and construction materials for development came from the Civil Works Administration.

The cultural context of the White Sands area includes ancestral puebloans and Apaches (notably the Mescalero), the Spanish and Mexicans, and southern Americans, mostly from Texas. The Mexican and Texan influence was the most influential, although Spanish colonial detailing in the buildings of the historic district is quite evident.

**Type of Context:** Physiographic

**Description:**

White Sands National Monument is situated in the Tularosa Basin of Southern New Mexico, which is surrounded by several mountain ranges, including the Organ, Sierra Blanca, Sacramento, and San Andreas.



*Tularosa Basin, extinct Lake Otero and surrounding San Andres and Sacramento Mountains, origins of the White Sands*

**Type of Context:** Political

**Description:**

The White Sands National Monument Historic District is located in Otero County, New Mexico. The monument was established by Executive Proclamation of President Herbert Hoover on Jan. 18, 1933, to preserve a significant portion of the world's largest gypsum dune field. The development of the monument's visitor facilities occurred during the Depression. The Master Plan for the site's layout and development was finalized in 1936.

Besides the interests of the National Park Service, White Sands must interact with the political influences of the military, as Holloman Air Force Base and the White Sands Missile Range continue to have impact on the park's management. Alamogordo and smaller surrounding communities also have interests in White Sands.

**Management Unit:** WHSA

## Management Information

### General Management Information

**Management Category:** Must be Preserved and Maintained

**Management Category Date:** 07/12/2002

### NPS Legal Interest:

**Type of Interest:** Fee Simple

### Public Access:

**Type of Access:** Unrestricted

### Adjacent Lands Information

**Do Adjacent Lands Contribute?** Yes

### Adjacent Lands Description:

The White Sands NM Historic District is the headquarters area for all of White Sands National Monument. The surrounding National Monument contributes to the significance of the Historic District.

## National Register Information

### Existing National Register Status

#### National Register Landscape Documentation:

Entered Inadequately Documented

### National Register Eligibility

**National Register Concurrence:** Eligible -- SHPO Consensus Determination

**Contributing/Individual:** Individual

**National Register Classification:** District

**Significance Level:** State

**Significance Criteria:** A - Associated with events significant to broad patterns of our history  
C - Embodies distinctive construction, work of master, or high artistic values

**Period of Significance:**

<b>Time Period:</b>	AD 1933 - 1940
<b>Historic Context Theme:</b>	Expressing Cultural Values
<b>Subtheme:</b>	Architecture
<b>Facet:</b>	Rustic Architecture
<b>Other Facet:</b>	None
<b>Time Period:</b>	AD 1933 - 1940
<b>Historic Context Theme:</b>	Expressing Cultural Values
<b>Subtheme:</b>	Landscape Architecture
<b>Facet:</b>	The 1930's: Era Of Public Works
<b>Other Facet:</b>	None
<b>Time Period:</b>	AD 1933 - 1940
<b>Historic Context Theme:</b>	Transforming the Environment
<b>Subtheme:</b>	Conservation of Natural Resources
<b>Facet:</b>	Origin And Development Of The National Park Service
<b>Other Facet:</b>	None

**Area of Significance:**

<b>Area of Significance Category</b>	<b>Area of Significance Subcategory</b>
Architecture	None
Landscape Architecture	None

**Statement of Significance:**

The White Sands National Monument (NM) Historic District consists of an ensemble of designed landscape and architectural features containing eight administrative, visitor, and service structures, with roads, pathways, plantings, and smaller landscape features, that are historically significant under both Criteria A and C as fine examples of the architecture (Spanish colonial) and designed landscapes erected during the Depression years through the cooperative efforts of the National Park Service and the Civil Works Administration public works program.

Built between 1936 and 1940, the site planning, buildings and associated landscaped features are significant under both criteria as properties achieving significance because of exceptional importance both as illustrative of National Park Service stylistic developments in landscape architecture and architecture prior to World War II, and as examples of public work projects.

The buildings and landscape were designed by National Park Service Branch of Plans and Design. Lyle E. Bennett designed the Administration Building (LCS file). The designs for the landscape were

based on drawings by Landscape Architect Charles A. Richey of the Western Division Branch of Plans and Design in San Francisco (1935 Master Plan). Richey also directed the landscaping and the layout of buildings and improvements at White Sands. Personal input was also given to layout and construction by Frank A. Kittredge, Chief of the Branch of Engineering, and W. G. Attwell, Associate Engineer. NPS Regional Landscape Architect H. Cornell also participated in the preparation of plans for development. The buildings were constructed by WPA relief workers as a Recreational Demonstration Project under the Civil Works Administration. They are excellent examples of the adaptation of Spanish colonial adobe building styles and materials to the southern New Mexico environment and NPS design views, and are notable for their expressive design, sensitivity to the environment, use of natural materials, and hand-crafted uniqueness of form, texture and detail. This highly popular regional style of architecture, "made prominent in Santa Fe in the 1920s and 1930s by John Gaw Meem," ... reflected the broader view of the park service..." (Welsh, 1995)

Set in a combined natural and designed landscape of native plants, the assemblage largely preserves the original plans of the architects and landscape architects, as well as the fine craftsmanship of the workers.

#### **National Historic Landmark Information**

**National Historic Landmark Status:** No

#### **World Heritage Site Information**

**World Heritage Site Status:** No



## Chronology & Physical History

### Cultural Landscape Type and Use

**Cultural Landscape Type:** Designed

**Current and Historic Use/Function:**

**Primary Historic Function:** View

**Other Use/Function**

Exhibit

Government-Other

**Other Type of Use or Function**

Both Current And Historic

Both Current And Historic

**Current and Historic Names:**

**Name**

White Sands National Monument Historic  
District

**Type of Name**

Current

**Ethnographic Study Conducted:** No Survey Conducted

**Associated Group:**

**Name of Group:** Chiricahua Apache

**Type of Association:** Historic

**Name of Group:** Jornada Mogollon

**Type of Association:** Historic

**Name of Group:** Mescalero Apache (primary historic Native American  
association)

**Type of Association:** Historic

**Name of Group:** Mexican

**Type of Association:** Historic

**Name of Group:** Texan/Southern EuroAmerican

**Type of Association:** Both Current And Historic

**Name of Group:** Warm Springs Apache

**Type of Association:** Historic

**Ethnographic Significance Description:**

No current ethnographic projects are underway.

The White Sands area was used by several prehistoric groups, some of which left hearths that are

today preserved as hardened pedestals in the dunes. From 1100-1350, the Puebloan Jornada Mogollon had spread from the adjacent foothills and established two large villages on the shore of Lake Lucero, abandoned at the end of that period.

By the late 1500s, Apachean groups had migrated from the north to the area. The Mescalero Apache are most closely associated, sometimes gathering natural resources like gypsum, although the Chiricahua and Warm Springs Apaches also were familiar with the White Sands area.

From the 1500s to the late 1800s, the Apache dominated the area, although they preferred settlement in the foothills and used the White Sands area only for trails and temporary camps. The Apache prevented Mexican settlement in the area, although Mexican traders gathered gypsum and salt in the White Sands.

With the acquisition of the area by the U.S. in 1848, an active campaign to control and contain the Apache began. Texan cattlemen and ranchers began to move into the area by the 1870s, and the Apache were placed on reservations by the 1880s.

With an end to the Apache threat, ranches were established by Mexican families such as the Luceros, and Texans like Oliver Lee. The ranching culture of the area was the result of mixing of Texan and Mexican traditions.

**Chronology:**

<b>Year</b>	<b>Event</b>	<b>Annotation</b>
AD 1933	Established	White Sands National Monument established on Jan. 18 by order of President Hoover
AD 1934	Built	Loop road and parking area in Crystal Bowl built by the end of April by WPA crew (funded by CWA); 158.91 acres added; planning for museum begins
AD 1935	Designed	Master Plan developed
AD 1936	Built	Construction of Administration and Museum Building, Comfort Station, Portal, and Utility Building began
AD 1937	Built	Administration and Museum Building, Entry Walls and Parking Area, Comfort Station, Residences No. 1 and No. 2, Powerhouse Building, and Gas and Oil Building completed.
AD 1938	Built	Park begins construction on Residence No. 3. Road to dunes is paved.
AD 1939	Built	Residence No. 3, Warehouse and Laundry, and Maintenance Compound Walls completed. Concession operation started.
AD 1940	Built	CWA development work ends. Museum exhibits are installed.
AD 1941	Built	Museum opens.
AD 1942	Established	Military establishes Alamagordo Bombing and Gunnery Range.
AD 1945	Established	White Sands Proving Grounds established. Nuclear tests at Trinity.
AD 1948	Established	Holloman Air Force Base established.

AD 1953	Built	NPS builds pipeline parallel to the highway for water from military.
AD 1956	Established	Mission 66 Program established.
AD 1958	Built	Pipe gates at entry wall and masonry signs in front of visitor center , at "Y" on loop drive, and in giftshop parking lot erected
AD 1964	Altered	Residence No. 4 begun as Mission 66 project. New entrance station built. Concession addition begun.
AD 1965	Built	Residence No. 4 and Concession addition completed; the concession building obstructs original designed view of the dunes.
AD 1966	Built	Replace and install LP gas system at the present location.
AD 1971	Built	Wooden fence built to separate residence area from Visitor area (current fence built in 1990s). Replanting of native plants in front of Visitor Center. One house trailer at present location.
AD 1973	Altered	Visitor Center re-stuccoed. Asphalt helicopter pad installed next to maintenance area. Asphalt resurface from parking lot to beyond interpretive post #7.
AD 1982	Built	Flammable Storage Building built; second house trailer located at present site. In early 1980s the road was realigned from the direct route between the visitor center and the entrance station, to the present (1999) one between the V.C. and maintenance.
AD 1987	Altered	Second concession addition made to administration building, which closes in rear of patio.
AD 1997	Built	New Administration Building erected, affecting original spatial design of use clusters. Rehabilitation of Visitor Center buildings begins, including roofing, paint, and replacement of cover between V.C. & rest room, which is completed in 1998.

## Physical History:

10,000 BC - AD 1880s: Native American hegemony over Tularosa Basin

Archaeological evidence shows a succession of Native American cultures that had the area under control, from the earliest hunters and gatherers, to the puebloan Jornada Mogollon, to the arrival of the Apache by the 1600s. The area was part of Apacheria and was visited little due to the danger of Apache resistance. It was nominally under Spanish and then Mexican rule until 1848, though there were no settlements in the area. Occasional Mexican traders would gather gypsum or salt. The area was part of Mexico until 1848, when the area was turned over to the U.S. as part of the Treaty of Guadalupe Hidalgo. The Mescalero Apache dominated the area until the 1880s, when they were defeated by the U.S. Army and placed on nearby reservations.

1880s-1940: Ranching in the White Sands

Texas cattlemen began driving cattle through the area in the 1870s, and the first ranches were established in the 1880s, with the final defeat of the Apache. Mexican families also had small ranches, like the Luceros. Some lands were withdrawn for use as White Sands National Monument in 1930. Ranching effectively came to an end throughout much of the Basin with the arrival of the military and the withdrawal of lands in the 1940s.

1922-1933: Preparations for Establishment of White Sands National Monument

In 1922, the All-Year National Park campaign, an attempt to establish a huge national park in much of southern New Mexico, was officially begun. While it did not succeed, it drew the first attention to White Sands' potential as a federally-protected area. In 1926 the idea for White Sands National Monument was proposed by Frenger, and Tom Charles emerged as leader to establish the park. Late in 1928, State Route 3 was built past the dunes, and in 1930 Hoover withdrew public lands for national monument purposes. In 1931 the White Sands Motel, gas station and campground existed further west along the dunes, and in 1932, the federal highway was completed. White Sands was officially established as a National Monument in 1933.

1933-1940: Establishment and CWA/WPA Development of White Sands National Monument

Established as a National Monument by Hoover in 1933, White Sands experienced a delay in funding, which meant the first developments began in 1934, with a Civilian Works Administration (CWA) Works Progress Administration (WPA) crew building a loop drive and clearing a parking lot. The visitor center was completed with emergency relief monies received by the monument during the late 1930s. NPS naturalist Robert Rose began planning for a museum at the monument in November 1934 to help educate the public about the areas geology and natural resources. NPS archeologist Charlie R. Steen completed the final plans for the museum cases that included three stories--the origins of the dunes, the ecology of the White Sands, and the ethnology of the Mescalero Apache and the Spanish exploration of the Tularosa Basin (Welsh, 1995). The museum opened to the public in 1941. The structures were based on NPS master plans from 1935 done by the NPS Branch of Plans and Design in San Francisco. Construction of the buildings was done in a three cluster area based on uses for visitors/administration, maintenance, and employee residence. The CWA-constructed complex

was begun in 1937 and completed in 1940 (See Chronology and Building Analysis sections for details).

#### 1940-1964: Military Developments at White Sands

Beginning in 1940-41, the military began developments of facilities for testing bombs and missiles in the Basin, with the result that White Sands National Monument found itself surrounded by military reservation lands. Except for the adjustments required by having the military as a disruptive presence, White Sands National Monument experienced little development except for regular maintenance.

#### 1964-1999: Mission 66 and Later Additions to White Sands

Growth in visitation from the 1950s inspired the NPS to develop Mission 66. At White Sands this resulted in the building of a new residence in 1964-65. The entrance station kiosk was constructed in 1964. Some minor utility changes were made during this time, such as the LP gas system replacement. Changing needs provided for the steady addition of new elements in the headquarters complex from the 1970s to the 1990s. Some are compatible with the older NPS design (Paint and Flammables Storage) and others were not (house trailers and the new Administration Building). The growth of the concession operation and future plans for further alterations or building additions cause concerns over how much change can be accommodated before the historic character of the headquarters area is lost.



*Interpretive planting in front of the visitor center, 1994.*

## Analysis & Evaluation of Integrity

### Analysis and Evaluation of Integrity

#### Analysis and Evaluation of Integrity Narrative Summary:

The White Sands NM Historic District was listed on the National Register as the “White Sands National Monument Historic District” in 1988. The nomination focused on the buildings. This inventory’s evaluation and analysis will expand upon the nomination by considering additional issues in the district, such as views/vistas, vegetation (especially historic plantings), and spatial organization.

The Historic District at White Sands is organized in three functional clusters: the visitor/administration cluster, the maintenance cluster, and the park residential cluster. The entrance extends from the highway through the central cluster (featuring the visitor center) and to the dunes beyond. Views of the approaching dune face were a primary reason the location was selected for headquarters. Thus the integrity rating is rated at medium overall, with some elements remaining high. This CLI will use the terms “administration/museum building” (the original historic name) and “visitor center” (the current name) interchangeably.

The architecture of the district is in the Spanish colonial adobe style made popular by John Gaw Meem. It was designed to respond to the region’s vernacular Spanish puebloan architecture but adapted to programmatic needs of the era, an approach typical of the NPS’ rustic architecture built during the CWA/WPA era of the late 1930s.

Considering the changing programmatic needs over the years, the district has kept its essential character of space, form, and design. Some intrusive elements have crept in over the years, such as trailers, sheds, utilities, and fences. The most marked changes have been in the realignment of the entrance road and the construction of a new “temporary” administration building near the maintenance cluster.

Threats to the district include this “accumulative creep” of non-historic elements, and the drainage problems caused by occasional downpours and associated pooling of rainwater. The soils are quite soluble, and the visitor center appears to some observers to be slowly sinking into the ground. Studies are currently underway to monitor this situation.

The following is a summary of the primary contributing and noncontributing features.

#### CONTRIBUTING

Circulation features (walks, roads) that are original to the 1930s 1940s design layout  
Buildings: Visitor Center (“Administration/museum building”) and patio, comfort station, residences No. 1 3, utility and powerhouse building, warehouse and laundry building, and gas and oil building  
Native plantings that are representative of the Tularosa Basin  
Adobe walled enclosure around maintenance cluster  
Adobe walled enclosures around residential patio/gardens

Adobe walled enclosure around visitor center and parking lot  
Residential patios/private gardens/yards  
Common use areas/yards of the maintenance and residential clusters  
Three part spatial organization of administration/visitor, maintenance, and residential functional clusters  
Historic cottonwoods throughout historic district  
Primary parking lot in front of Administration/museum (visitor center) building  
View to dunes from visitor area, especially patio (now obstructed by nonhistoric concession additions)

#### NONCONTRIBUTING

Buildings: New administration building, paint and flammable storage building, residence No. 4  
Features: fence around residential area, waste/recycling areas, sheds, trailer houses, some add on carports, LP gas area, playground, volleyball area, and trailer hook ups  
Concession parking lot and new entry drive and entrance station  
Sidewalk between comfort station and administration/museum building  
Pipe gates  
Satellite dishes and utility lines and poles

INTEGRITY RATING: Overall, in form, intent, and spatial organization, the White Sands NM Historic District has retained its historic integrity. Some modern elements are impinging on its integrity, especially the new administration building and the concession addition.

#### 1. DESIGN: RETAINS INTEGRITY

The design of the district retains much of its integrity, although some loss of integrity has occurred due to the addition of the new administration building, the realignment of the entrance drive, and the concession addition. Historic planting areas have continued to be used in essentially the same way, although the patio area has some damage to its historic fabric due to drainage problems.

#### 2. LOCATION: RETAINS INTEGRITY

The district remains in its historic location

#### 3. SETTING: RETAINS INTEGRITY

The setting of the historic district remains in its original location through its preservation as a National Monument.

#### 4. MATERIALS: RETAINS INTEGRITY

Materials, including building fabric and vegetation, retains a high degree of integrity.

#### 5. WORKMANSHIP: RETAINS INTEGRITY

Workmanship, including land use, retains a high degree of integrity.

#### 6. FEELING: RETAINS INTEGRITY

The feeling of the district and its association with the dunes has a high level of integrity, with some problems associated with the views of the dunes being imposed on by the new administration building



and obstructed from the patio by the concession addition.

#### 7. ASSOCIATION: RETAINS INTEGRITY

Continuing use of the headquarters, maintenance area, and visitor center have assured high integrity in this category.

### **Landscape Characteristic:**

#### **Archeological Sites**

No archeological investigations have taken place within the historic district's boundaries, although there are Native American sites located in several other areas of the park, such as the Mogollon site at Lake Lucero. Ground-disturbing activities should allow for the possibility of historic era (pre-1949, in 1999) deposits, such as trash middens and features associated with construction.

#### **CONTRIBUTING**

- None

#### **NONCONTRIBUTING**

- None

#### **Character-defining Features:**

Feature Identification Number:	94420
Type of Feature Contribution:	Undetermined

#### **Buildings and Structures**

The buildings and structures within the Historic District have been well-described in the nomination form and will be briefly summarized here as the dominant features of the historic designed landscape.

The buildings are arranged into three use areas (see Spatial Organization): maintenance, administration/visitor services, and residential.

The contributing CWA/WPA era building designs are based on NPS "rustic" architecture and the region's vernacular Spanish pueblo adobe architectural style made popular during the 1920s and 1930s in northern New Mexico by John Gaw Meem. (This style is also sometimes referred to as the "pueblo revival" style.) The earth colors, flat roofs, irregular massing and surfaces, and details such as vigas and portals all are signature elements of the region's architecture. NPS rustic architecture takes its lead from the regional architecture, and adds elements such as signage styles and functional needs for NPS tasks.

Over the years a number of buildings have been added as the park's needs have expanded. Another residence was added as a Mission 66 project in 1964. A paint and flammable storage

building was added in 1982. Though these two buildings are not historic, their additions have caused little impact, as they are compatible in scale, form and function with the areas in which they were built. Both are therefore considered to be "supporting" rather than "non-contributing." The residence may actually become "contributing" if the theme study on Mission 66 results in the necessity to evaluate features and structure in that context.

The most jarring addition is the new administration building built in 1997. Although classified as temporary and attempts were made by park staff to soften its appearance through the addition of "adobe-look" walls and compatible-colored stucco, and the addition of native plantings, the building is still intrusive for several reasons. As an administration building located near the maintenance cluster, it violates the spatial organization of the original design. Its mass is quite large and out of scale with the other buildings, and interferes with the important view of the approaching dune face.

#### CONTRIBUTING

- Administration/museum building
- Comfort station
- Residences No. 1-3
- Warehouse and laundry building
- Gas and oil building
- Utility and powerhouse building
- Adobe walls of the residential yards, the administration/museum building and parking lot, and the maintenance compound

#### NONCONTRIBUTING

- New administration building
- Sheds
- Trailers
- Paint and flammable storage building
- Residence No. 4

#### Character-defining Features:

Feature: Administration and Museum Building

Feature Identification Number: 94421

Type of Feature Contribution: Contributing

IDLCS Number: 22642

LCS Structure Name: Administration and Museum Building

LCS Structure Number: 20

Feature: Comfort Station

Feature Identification Number: 94422

Type of Feature Contribution: Contributing

IDLCS Number: 22643

LCS Structure Name: Comfort Station

LCS Structure Number: 21

Feature: Entry Walls

Feature Identification Number: 94423

Type of Feature Contribution: Contributing

IDLCS Number: 68399

LCS Structure Name: Entry Walls

LCS Structure Number: 11

Feature: Gas and Oil Building

Feature Identification Number: 94424

Type of Feature Contribution: Contributing

IDLCS Number: 68401

LCS Structure Name: Gas and Oil Building

LCS Structure Number: 31

Feature: Maintenance Compound Walls

Feature Identification Number: 94425

Type of Feature Contribution: Contributing

IDLCS Number: 68411

LCS Structure Name: Maintenance Compound Walls

LCS Structure Number: 30A

Feature: Residence No.1

Feature Identification Number: 94426

Type of Feature Contribution: Contributing

IDLCS Number: 68404

LCS Structure Name: Residence No.1

LCS Structure Number: 01

Feature: Residence No.2

Feature Identification Number: 94427

Type of Feature Contribution: Contributing

IDLCS Number: 68405

LCS Structure Name: Residence No.2

LCS Structure Number: 02

Feature: Superintendent's Residence

Feature Identification Number: 94428

Type of Feature Contribution: Contributing

IDLCS Number: 68406

LCS Structure Name: Superintendent's Residence

LCS Structure Number: 03

Feature: Utility and Power House Building

Feature Identification Number: 94429

Type of Feature Contribution: Contributing

IDLCS Number: 68400

LCS Structure Name: Utility and Power House Building

LCS Structure Number: 30

Feature: Warehouse and Laundry

Feature Identification Number: 94430

Type of Feature Contribution: Contributing

IDLCS Number: 68402

LCS Structure Name: Warehouse and Laundry

LCS Structure Number: 32

### **Circulation**

Originally, the entrance road at White Sands went right through the parking area and under the historic portal, between the comfort station and the administration building (where the entrance station was), and then straight out the back to the dunes. Staff took either the maintenance or residential branch roads.

In 1964 the entry was changed due to the need to accommodate larger vehicles such as RVs. The entrance road is now to the west of the parking area, and it passes between the

maintenance and visitor areas, leading to the relocated entrance station a few hundred feet further toward the dunes.

While the historic circulation has changed somewhat, the essential character may still be seen in the visitor circulation sequence of the entrance, the pause at the visitor center, and the continuation to the dune area.

The retention of the original spatial organization has similarly preserved the flow of park staff traffic to the maintenance and residential areas. The addition of the new administration building produced the only change in the historic pattern for those two areas.

Staff tend to walk from the residential and maintenance/new administration areas to the visitor complex. Visitors also circulate from the museum area to the concession area through the portal rather than the outside walk that leads around the side. This only changes when there is an overflow of the front parking lot and people are redirected to the rear concession lot, or when their first stop is for refreshments in the concession area.

#### CONTRIBUTING

- Visitor and staff circulation routes between clusters

#### NONCONTRIBUTING

- New entrance road

#### Character-defining Features:

Feature Identification Number:	95142
Type of Feature Contribution:	Undetermined

#### Cluster Arrangement

As indicated in the section on spatial organization, the buildings are clustered into three areas, depending on associated activities.

A. In the maintenance area cluster, the compound wall defines the maintenance yard and associated buildings, all facing inward to the yard. The buildings have retained their maintenance focus and are now used for shops, gas and oil, and storage. The new administration building throws off the functional design of this cluster, although at least it is park staff-focused rather than intended for visitors. Other modern intrusive sheds are in this cluster.

B. The visitor area cluster is the heart of the district. It contains the administration and museum building with the concession addition, as well as visitor-associated features, like phone, patio, parking lots, and native plantings.

C. The residential cluster is the most private area, protected by a modern fence. It contains three historic residences, a Mission 66 residence, and several modern intrusive additions such as house trailers and volunteer RV hookups.

#### CONTRIBUTING

- The three clusters (maintenance, visitor, and residential)

#### NONCONTRIBUTING

- The location of the new administration building
- Nonhistoric resources such as trailers and LP gas enclosure location

#### Character-defining Features:

Feature Identification Number:	95143
Type of Feature Contribution:	Undetermined

#### Cultural Traditions

References to cultural traditions within the historic district may be seen in the use of regional vernacular architecture as inspiration, that is, vernacular Spanish-Pueblo elements actually designed by NPS professional architects. This also includes the interior fixtures (water fountain, tin lamps). The planting area in front of the visitor center, planted with specimen plants of the region, the patio area with its shady native species, and the large open, undesigned areas left to the natural vegetative communities, are hallmarks associated with the period of rustic NPS landscape architecture.

However, local workers carried out the painstaking handwork, which can be seen in the execution of the corbels, the masonry, and the tinwork. It is this researcher's observation that it is somewhat ironic that non-Hispanic professional architects designed "Spanish-Pueblo" features carried out by local workers, some of whom according to park staff were craftspeople of the local Spanish-Mexican culture.

#### CONTRIBUTING

- Traditional Spanish craftsmanship

#### NONCONTRIBUTING

- None

#### Character-defining Features:

Feature Identification Number:	95144
Type of Feature Contribution:	Undetermined

#### Land Use

Land use of the historic district continues as the headquarters for White Sands National Monument. Park staff and visitors continue using the various structures and spaces in the same way that they did in the 1930s and 1940s. Some details have changed, along with the relocation

of the entrance road, but land use as an administrative and visitor complex, and maintenance center and residential area remains the same.

#### CONTRIBUTING

-Use of area for visitor functions, administration, maintenance, and residence

#### NONCONTRIBUTING

-None

#### Character-defining Features:

Feature Identification Number:	95145
Type of Feature Contribution:	Undetermined

#### Natural Systems And Features

White Sands National Monument Historic District lies on a level plain near the edge of the gypsum dunes which give the park its name. The site is very level, even to the point of being a depression, and that, coupled with the altered topography and raised roadbeds and walks often cause drainage problems and the concomitant damage to structures and paved surfaces.

The park is set on the northern tip of the Chihuahuan Desert, and has the typical biotic communities of that desert (see Vegetation). The District is set just outside the approaching dune field, which may one day prove a threat.

#### CONTRIBUTING

- Chihuahuan Desert habitat

#### NONCONTRIBUTING

- Altered topography

#### Character-defining Features:

Feature Identification Number:	95146
Type of Feature Contribution:	Undetermined

#### Small Scale Features

Various historic small scale features add to the human dimensions and design of the Historic District. Several historic signs are located near the visitor center. The patio and its detailed vigas and tinwork fixtures add interest through their details and creation of visual space. A bench inside the patio area has been in that same location since 1940 or so. Adobe walls and gates, especially a modern carved door near the visitor center, add scale. The White Sands National Monument sign in front of the visitor center is a popular site for people to take each other's photographs.

#### CONTRIBUTING

- Historic masonry and wood NPS signage
- Fixtures, vigas

#### NONCONTRIBUTING

- Trash/recycling bins, pole gates, phone
- Satellite dishes, wooden fence

#### **Character-defining Features:**

Feature Identification Number:	95147
Type of Feature Contribution:	Undetermined

#### **Spatial Organization**

The spatial organization of the White Sands National Monument Historic District is closely related to the cluster arrangement (see diagram in Cluster Arrangement).

The district is organized into three clusters, differentiated by function (maintenance, residential and administrative/visitor services). The spatial organization is decidedly horizontal, as there is no appreciable topography or natural obstructions.

Within each of the three areas there are open areas which serve as gathering or work areas, defined by the surrounding buildings and compound walls. The maintenance area has a work yard and gas and oil house in its central area, while the residential area has a green space and circular drive as its central node. The administrative/visitor center has a patio/courtyard as its central gathering place.

#### CONTRIBUTING

- The three functional areas, with common open spaces in each

#### NONCONTRIBUTING

- The new administration building

#### **Character-defining Features:**

Feature Identification Number:	95148
Type of Feature Contribution:	Undetermined

#### **Topography**

The overall topography of the historic district at White Sands is fairly level. However, the visitor center seems to be at a slightly lower level. The original grading plans (see graphic) show a



basically level site which is highest in the residential area (about 3996.3') sloping down to the visitor center (3995.4') and fairly level to the maintenance cluster (about 3993.6'). The parking was also graded higher and slopes run drainage toward the building. Since the site is fairly level, the drainage plan has proven inadequate for the site, and the visitor center even seems to be slowly sinking into the ground.

The soil is quite soluble and pooling of water caused by inadequate drainage only exacerbates the problem. This apparent "sinking" of the building is an issue which should be investigated by soils specialists and engineers, as it is the greatest threat to the district.

#### CONTRIBUTING

- Topography of dunes

#### NONCONTRIBUTING

- Altered topography due to inadequate drainage

#### Character-defining Features:

Feature Identification Number:	95149
Type of Feature Contribution:	Undetermined

#### Vegetation

The vegetation within the White Sands NM Historic District is composed of either native interdune and lowland species in unplanted areas, or plants native to higher elevations in the Tularosa Basin. Typical species are soaptree yucca, hoary rosemarymint, mormon tea, skunkbush sumac, cottonwood, purple borage, rabbitbrush, four-wing saltbush, and alkali sacaton.

Scattered throughout the historic district, especially in the residential area, are cottonwoods planted in the historic period. These cottonwoods are also native to the interdune areas, and are an important landscape characteristic for the district. The planting beds in front of the Visitor Center combine various plant species native to the area that tend to be showy, such as the Big Yucca.

#### A SPECIAL LOOK AT THE PATIO AND ITS VEGETATION

The patio area is another area where the design features native plantings of yucca and cottonwood. The patio was originally planned in 1938 with two drainage channels, with flagstone paving in a rough cruciform shape with a central cottonwood tree in a raised planter. The eastern side sloped slightly to provide for drainage. Planting beds were to contain chamisa bushes and wildflowers, with one yucca.

A photograph from 1940 shows the patio was not built totally according to plan. The paving design was not cruciform but had pockets, pebbles set in mortar replaced the flagstones, and the drainage channels were not built as specified. However, a cottonwood was placed in the raised planter. No other plantings were evident.

By 1999, the patio shared the drainage problems of the site, which buckled and cracked the pebblestone. Several beds were still not planted, although several soap tree yuccas were planted, and the cottonwood tree was in good shape.

#### CONTRIBUTING

- Native plantings in front of visitor center and within patio/courtyard
- Native plantings in patio, pebblestone paving, central cottonwood in raised planter
- Historic cottonwoods (all along drive and in residential area)
- Volunteer native interdune/lowland grassland species in unplanted areas

#### NONCONTRIBUTING

- Noxious weeds, notably African rue (*Peganum harmala*)

#### Character-defining Features:

Feature Identification Number:	95150
Type of Feature Contribution:	Undetermined

#### Views And Vistas

Views, sweeping panoramas, at White Sands of the surrounding mountains, the bluish Sacramentos and the San Andres, provide a contrasting backdrop for the dramatic dunes of White Sands National Monument.

The visitor center (administration/museum building) was located so that the visitor could rest and see the face of the approaching dunes. This was especially true of the patio, which had a designed vista of the dune area (linear sightline) from the shady spot under the cottonwood.

This historic vista was totally obscured by the construction of concession additions in 1964-65 and 1986. The patio has changed in function from a shady point where one could view the dunes to an enclosed area.

The addition of nonhistoric elements such as utility lines and satellite dishes also detracts from the viewshed.

#### CONTRIBUTING

- Views of the surrounding Sacramento and San Andres Mountains, and distant dunefield
- Vista (now obscured) from patio toward approaching dunes to northwest

#### NONCONTRIBUTING

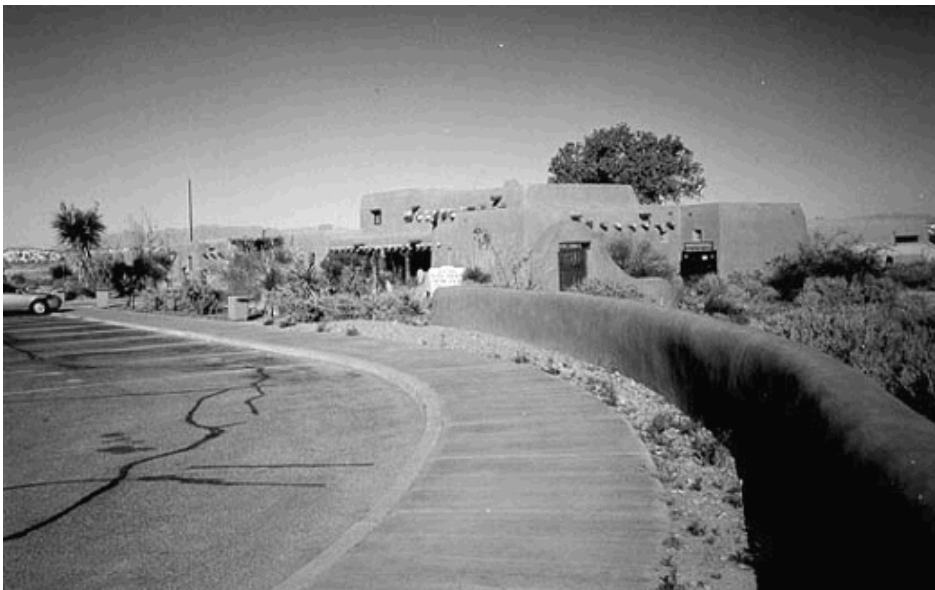
- Concession building
- Nonhistoric elements: utility lines, satellite dishes

**Landscape Characteristic & Features Graphics:**

**Characteristic:** Buildings and Structures

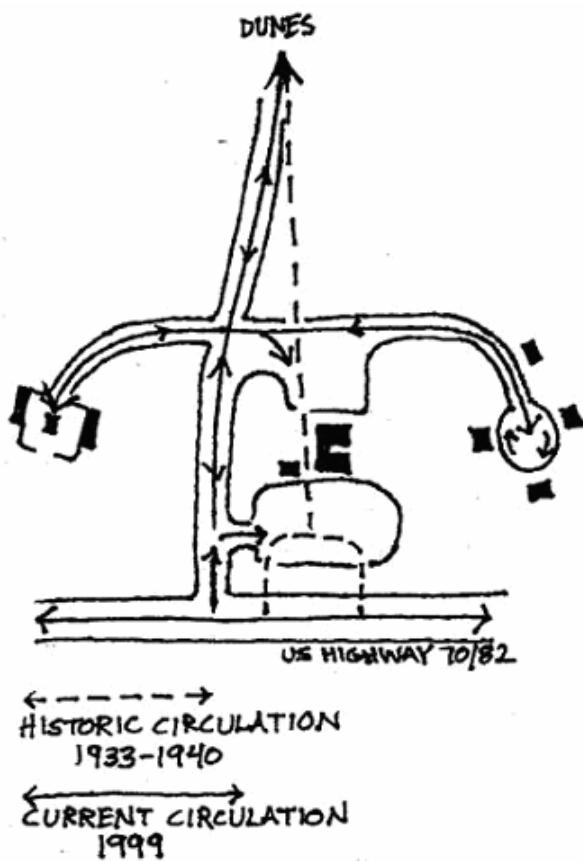


*Front of Administration and Museum Building. Photo taken January 20, 1944 (WHSA Archives).*



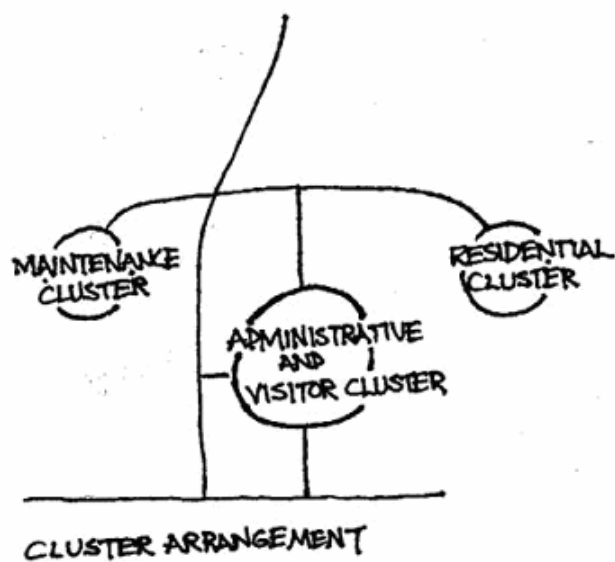
*Front of Administration and Museum Building. Photo taken April 23, 1999. (CLI Program, Intermountain Region, Santa Fe).*

**Characteristic:** Circulation

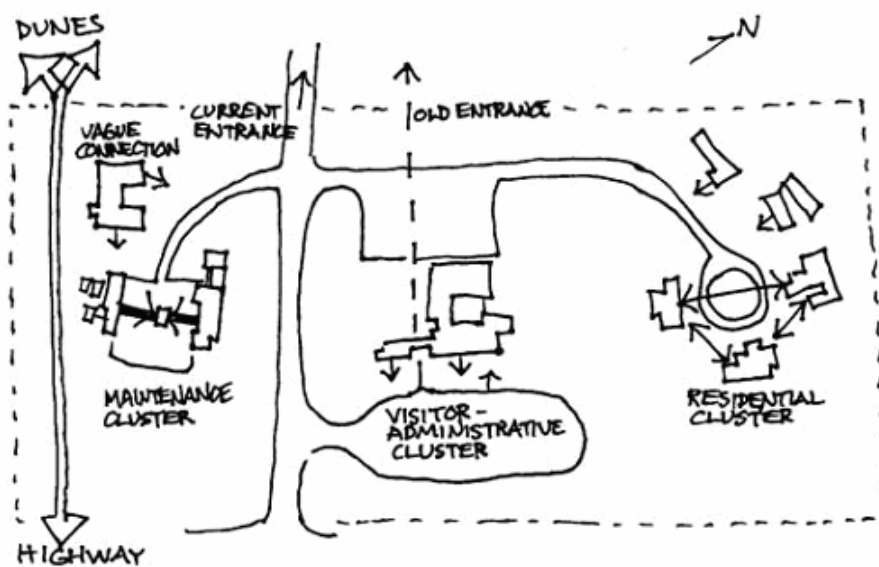


*Historic (1933-1940) and Current (1999) Circulation at White Sands NM Historic District*

**Characteristic:** Cluster Arrangement

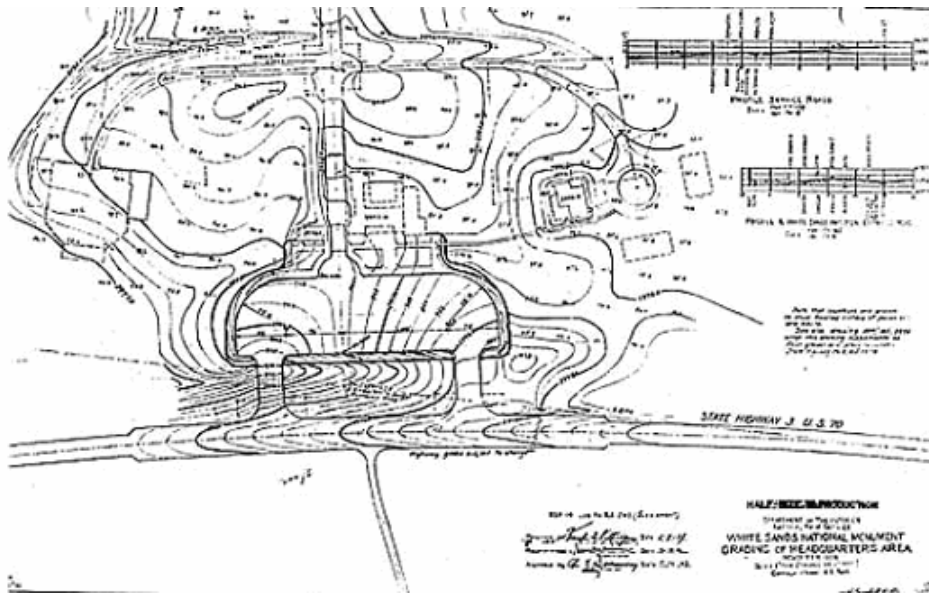


*Cluster Arrangement at White Sands National Monument Historic District*



*Cluster relationship of buildings and major elements in WHSA Historic District to each other.*

**Characteristic:** Topography



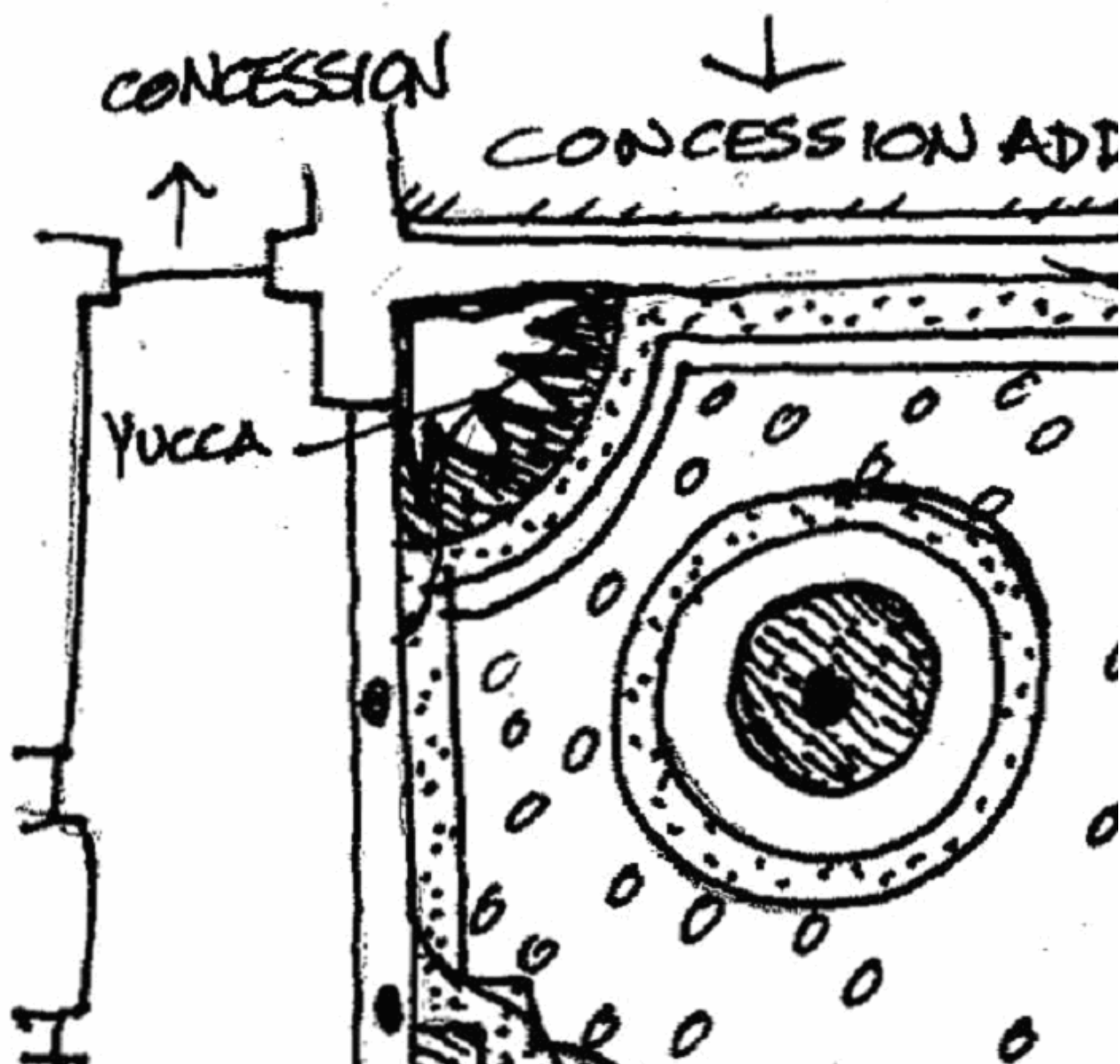
*1937 grading plan for the Historic District at the White Sands National Monument, showing the basically level character of the site, which contributes to the drainage problem.*

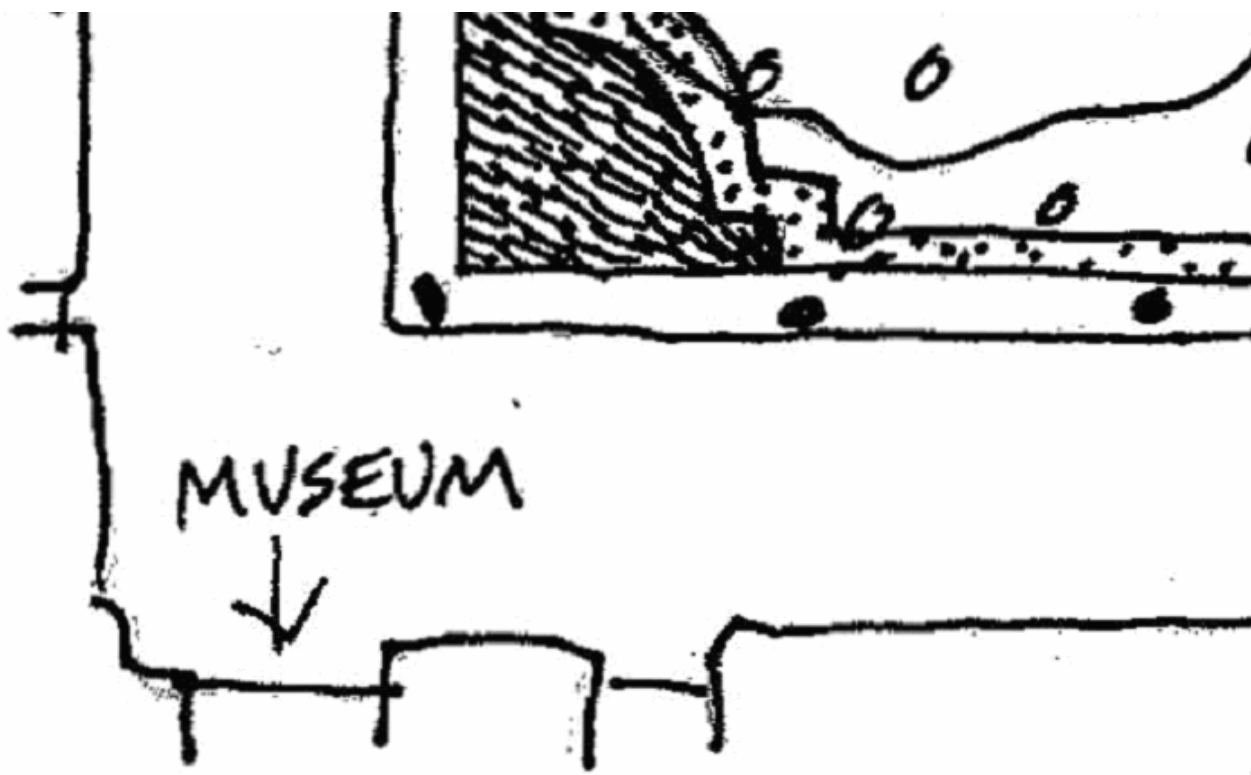
**Characteristic:** Vegetation



*Climax stage interdune vegetation, which is typical of the White Sands NM Historic District. See Buildings and Structures for the designed planting area in the district.*



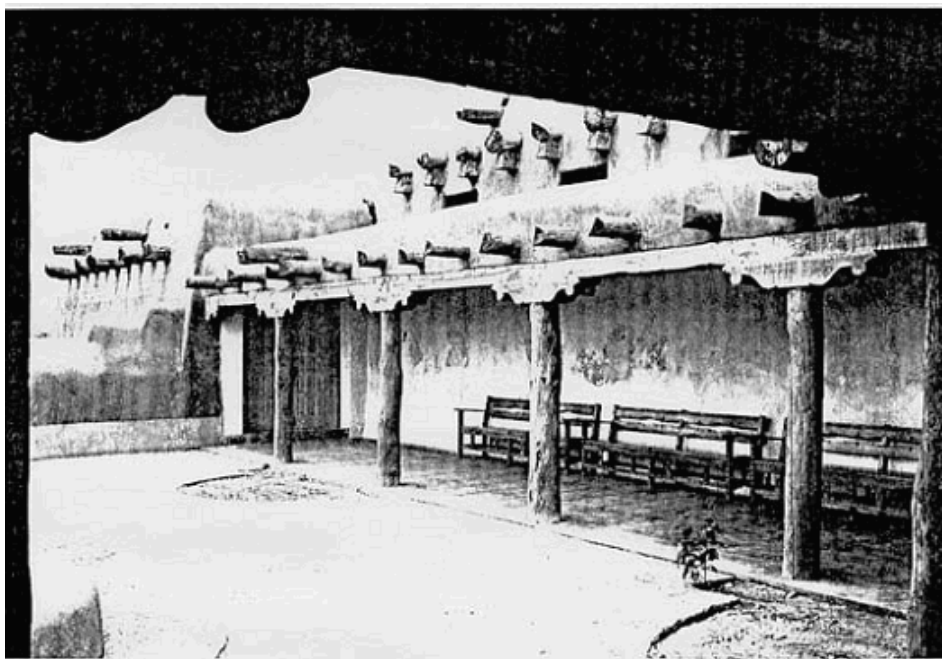




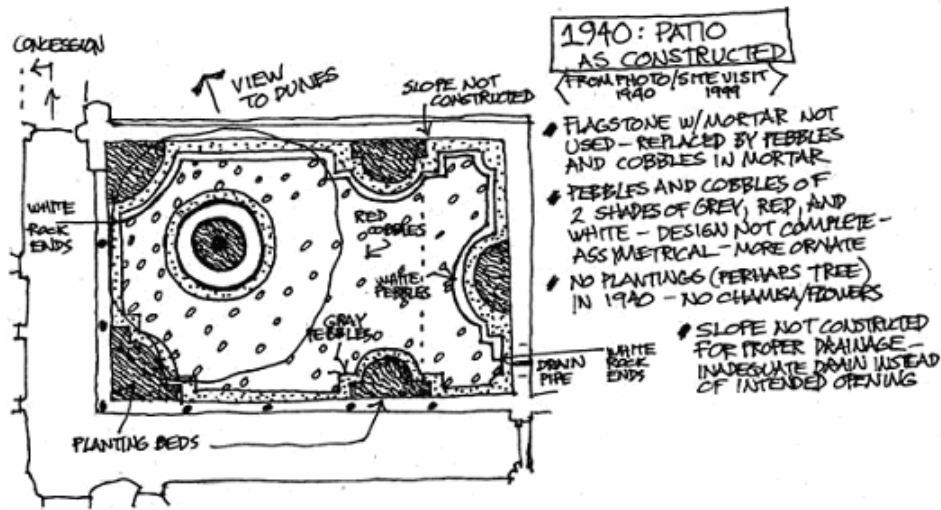
*WSA visitor center patio area in 1999.*



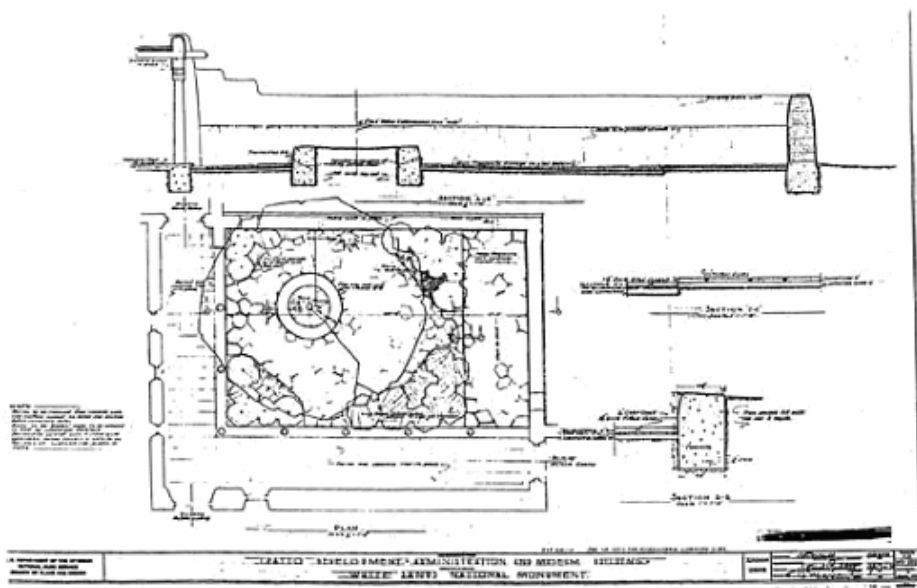
*WSA visitor center in 1991.*



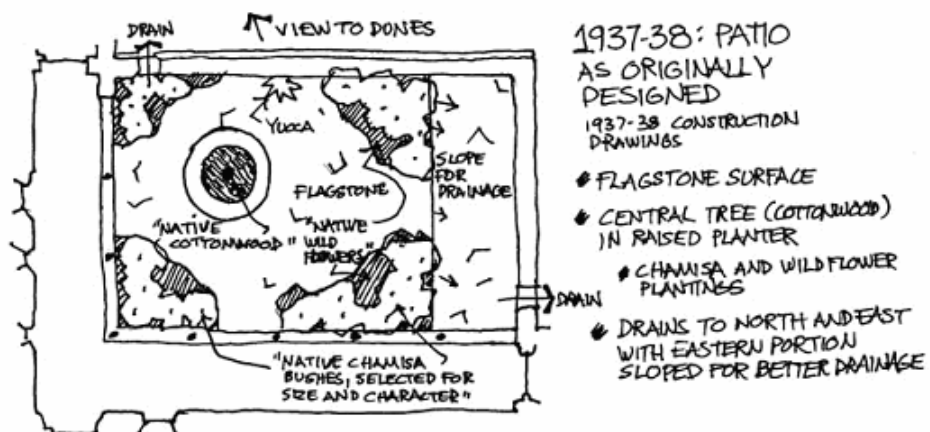
*WSA visitor center in 1940.*



WHSA visitor center patio as constructed, ca. 1940. Drawing extrapolated from a 1940 photograph and the 1999 field survey.



Original design drawing for the WHSA visitor center patio, with plants and elevations.



*WSA visitor center patio as originally designed; not the differences between this design and the patio as constructed.*

**Characteristic:** Views And Vistas



*View toward approaching dunes and San Andres Mountains in the background from roof of visitor center.*

## Condition

### Condition Assessment and Impacts

**Condition Assessment:** Good

**Assessment Date:** 01/25/2005

### Impacts

**Type of Impact:** Flooding

**Other Impact:** Occasional torrential monsoon rains can contribute to soil erosion.

### Stabilization Costs

**Landscape Stabilization Cost:** 0.00

### Landscape Stabilization Cost Explanatory Description:

No stabilization measures required at this time.

## **Treatment**

### **Treatment**

**Approved Treatment:** Undetermined

### **Approved Treatment Costs**

**Landscape Treatment Cost:** 0.00

### **Landscape Approved Treatment Cost Explanatory Description:**

There are no completed approved treatment documents (CLR or GMP) for WHSA at this time (2/10/05).



## Bibliography and Supplemental Information

### Bibliography

<b>Citation Author:</b>	Wanger, Gilbert//Featherstone, William
<b>Citation Title:</b>	Historical Sketch and Administrative History of White Sands National Monument (1933 -1973)
<b>Year of Publication:</b>	1973
<b>Source Name:</b>	CRBIB
<b>Citation Number:</b>	011325
<b>Citation Author:</b>	Campbell, Don///
<b>Citation Title:</b>	Master Plan, White Sands National Monument
<b>Year of Publication:</b>	1975
<b>Source Name:</b>	CRBIB
<b>Citation Number:</b>	012064
<b>Citation Author:</b>	Swanson, Betsy
<b>Citation Title:</b>	National Register of Historic Places - Nomination Form. White Sands National Monument Historic District. Includes reproductions of original 1938 plans for grading, patio, etc.
<b>Year of Publication:</b>	1986
<b>Source Name:</b>	Other
<b>Citation Type:</b>	Both Graphic And Narrative
<b>Citation Location:</b>	LCS Files, Intermountain Support Office, Santa Fe
<b>Citation Author:</b>	Welsh, Michael
<b>Citation Title:</b>	Dunes and Dreams: A History of White Sands National Monument, Administrative History, Intermountain Cultural Resource Center, Professional Paper No. 55
<b>Year of Publication:</b>	1995
<b>Citation Publisher:</b>	U.S. Department of the Interior
<b>Source Name:</b>	Other
<b>Citation Type:</b>	Both Graphic And Narrative
<b>Citation Location:</b>	Office of James Bradford, Archeologist, Santa Fe Support Office

**Citation Author:** Rose Houk and Michael Collier  
**Citation Title:** White Sands National Monument  
**Year of Publication:** 1994  
**Source Name:** Other

**Citation Author:** Dietmar Schneider-Hector  
**Citation Title:** White Sands: The History of a National Monument  
**Year of Publication:** 1993  
**Source Name:** Other

### Supplemental Information

**Title:** KEY TO SITE PLANS

**Description:** PERIOD OF SIGNIFICANCE (1936-1940)

- A. Administration and Museum Building (1936-37)
- B. Entry Walls (ca. 1937)
- C. Comfort Station (1936-37)
- D. Portal Entrance (1936-37)
- E. Residence No. 1 (1937)
- F. Residence No. 2 (1937)
- G. Residence No. 3/Superintendent's Residence (1938-39)
- H. Utility (1936) and Powerhouse (1937) building
- I. Gas and Oil Building (1937)
- J. Warehouse and Laundry (1939)
- K. Maintenance Compound Walls (ca. 1939)

(1940-1999)

- L. Residence No. 4/Ranger's Office
- M. Paint and Flammable Storage building (1982)
- N. Concession Additions (1964-65, 1987)
- O. Sheds (n.d./nonhistoric)
- P. House Trailers (1970; 1982)
- Q. LP Gas Enclosure (n.d./nonhistoric)
- R. Materials Yard (possibly historic)
- S. Playground (n.d./nonhistoric)
- T. Trailer Hookups (n.d./non-historic)
- U. New Administration Building (1997)
- V. Waste/recycling (n.d./nonhistoric)
- W. Utility Lines (n.d.)

### **Documentation Assessment**

**Documentation Assessment:** Fair

### **Documentation Checklist**

#### **Documentation**

<b>Document:</b>	Administrative History
<b>Year of Document:</b>	1995
<b>Amplifying Details:</b>	Dunes and Dreams: A History of White Sands National Monument, by Michael Welsh
<b>Adequate Documentation:</b>	No